REMARKS

Favorable reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

I. CLAIM STATUS AND AMENDMENTS

Claims 1 and 3 were pending when last examined.

Claims 1 and 3 were examined, and stand rejected.

Claims 1 and 3 are cancelled by this amendment, without prejudice or disclaimer thereto.

Claims 5-8 are newly added. Support for such claims can be found in cancelled claims 1 and 3, as well as paragraph [0022] of the specification as filed.

[Applicants note that a method claim has been previously examined. Specifically, cancelled claim 3 recited a method for demineralizing condensate.]

No new matter has been added.

II. CLAIM OF PRIORITY

Applicants have previously requested acknowledgment of the Claim of Priority and receipt of the certified copy of the priority document. Please see the Requests filed March 12, 2009 and September 12, 2008. However, such acknowledgment has not yet been made by the Examiner.

Applicants kindly note that the certified copy of the priority document is present in the Image File Wrapper for this application. Accordingly, Applicants respectfully request that the Examiner acknowledge the Claim of Priority, and receipt of the priority document, with the next correspondence.

III. OBVIOUSNESS REJECTIONS

On pages 2 and 3, claims 1 and 3 are rejected under 103 U.S.C. § 103(a) as being unpatentable over Ito et al. (US 6,633,624) in view of P. Chattopadhyay ("Boiler Operating Engineering Questions and Answers", 2000, pages 1225-1239).

This rejection has been rendered moot by the cancellation of claims 1 and 3. Further, this rejection is inapplicable to new claims 5-8 for the reasons set forth below.

New claims 5 and 6 relate to a method for demineralizing condensate in a nuclear power plant, and new claims 7 and 8 relate to a method for regenerating a mixed bed of a strongly acidic gel-type cation exchange resin, and a uniform particle size strongly basic porous anion exchange resin, for use in a condensate demineralizer of a nuclear power plant. [The regeneration limitations are also present in new claims 5 and 6.]

Ito et al. fails to teach or suggest the subject matter of Applicants' claims for two reasons.

First, Ito et al. discloses a mixed bed of a gel-type cation exchange resin and a porous Gaussian-type anion exchange resin. This anion exchange resin of the reference is distinct from that of Applicants' claims, as Ito et al. describes a Gaussian-type resin, rather than a uniform-particle size resin.

Second, Ito et al. teaches that both the cation exchange resin and the anion exchange resin are subjected to air scrubbing during regeneration. Please see column 6, lines 48-55 of the reference. This is clearly distinct from Applicants' claimed processes, wherein only the cation exchange resin of the mixed bed is subjected to air scrubbing after the separation of the resins into the cation exchange resin and the anion exchange resin.

Applicants' processes employ a mixed bed of a strongly acidic gel-type cation exchange resin, and a uniform particle size strongly basic porous anion exchange resin for condensate demineralization. It is known in the art that porous anion resins have a low wear resistance, and gel-type resins require frequent backwashes. Thus, the use of the mixed bed mentioned above inevitably results in wear of the porous resin during regeneration of the mixed bed, and thus, fails to provide stabilization of a high effluent quality for a long period of time.

However, Applicants' processes solve such problems by subjecting only the cation exchange resin to air scrubbing. Therefore, Applicants' processes are clearly superior to the method of Ito et al.

The Examiner relies upon Chattopadhyay as teaching that ion exchange resins having uniform particle size have superior performance characteristics for demineralizing condensate than resins having Gaussian particle size distribution. Additionally, Chattopadhyay teaches a mixed bed of strong acid cation exchange resins and strong base anion exchange resins.

However, the reference fails to teach or suggest the combination of gel-type cation exchange resins and porous anion exchange resins, as required by Applicants' claims.

Furthermore, Chattopadhyay teaches conventional regeneration processes, and thus, fails to remedy the deficiencies of Ito et al. regarding the improved regeneration techniques.

Thus, even if the references were combined in the manner discussed by the Examiner, the combination still fails to teach or suggest all of the limitations of Applicants' new claims. Accordingly, new claims 5-8 are patentable over the cited combination of references.

On pages 3 and 4 of the Office Action, claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagiwara et al. (JP 2000-046992).

This rejection has been rendered moot by the cancellation of claims 1 and 3. Further, this rejection is inapplicable to new claims 5-8 for the reasons set forth below.

Hagiwara et al. fails to disclose a regeneration process. Thus, Hagiwara et al. clearly fails to teach or suggest all of the limitations of Applicants' claims.

Therefore, claims 5-8 are patentable over the cited reference.

CONCLUSION

In view of the foregoing amendments and remarks, the present application is in condition for allowance and early notice to that effect is hereby requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact the undersigned attorney at the telephone number below.

The Commissioner is authorized to charge any deficiency or to credit any overpayment associated with this communication to Deposit Account No. 23-0975, with the EXCEPTION of deficiencies in fees for multiple dependent claims in new applications.

Respectfully submitted,

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July 20, 2009